

REMARKS

Claims 1-21 are currently pending in the above-identified patent application. Claims 1, 8, and 15 have been amended to limit these claims to transmitting component specific commands without component-specific changes, and transmitting action data without component-specific changes to the component. No new matter has been added, since support therefor may be found on page 7, lines 1-9, of the subject Specification, as originally filed, wherein it is stated that: "In block 314, the controller may send a command directly to the device. In such a case, the controller may send a command to the device without any analysis or interpretation. The command may be sent verbatim. In other cases, the controller may be capable of formatting, changing, or otherwise manipulating the command for a specific purpose. For example, the command as stored in the action may need to be transmitted on a particular set of output lines. In another example, the command may need to be shifted or changed prior to transmitting. Such an example may be used where the command, if stored verbatim in the script file would be incompatible with the file structure or otherwise become problematic." Component-specific changes are therefore not required to the script.

Claims 1-21 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, since the claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The Examiner continued that with regard to claims 1, 8, and 15, it is not found in the specification as originally filed where there is a teaching of executing an action code without translation, and it is not clear that applicant possessed this element of the claimed invention at the time of filing. The Examiner stated that it is also unclear why or how any translation would take place at the time of execution, as normally, any required translation is a step that occurs prior to receipt and execution, but that the Specification clearly teaches transmission without interpretation (translation); however, this is not what is being claimed. Claims 2-7, 9-14, and 16-21 were rejected for incorporating the same indefinite subject matter of the independent claims from which they depend.

Applicants wish to thank the Examiner for the careful analysis of the disclosure and claims, and have amended claims 1, 8 and 15 in accordance therewith.

Claims 1-21 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, since with regard to claims 1, 8, and 15, it is unclear whether an action data needs to be included in the action payloads, since the claim seems to include necessitating providing action data as part of the communication sequence, but then later includes limitations stating that none of this data needs to be included or transmitted (zero or more). In the case that zero action data is required, the Examiner continued, it is unclear what if anything the step requires, and the question arises whether the step of creating an action payload must still exist, as it serves no functional purpose, but is instead action without result.

Applicants wish to direct the Examiner's attention to page 6, lines 7-21, of the subject specification, as originally filed, wherein it is stated that: "The action payload 218 may contain zero or more data that may be transmitted with the command in the action descriptor 216. The action payload 218 may contain binary data that are transmitted directly to the low level device. In some cases, the action payload may be empty while in other cases the action payload 218 may contain very large amounts of data. Figure 3 illustrates an embodiment 300 of the present invention showing a method for processing a script file. The process begins in block 302. The script file is received in block 304 and the header is processed in block 306. The first action is read in block 308 and the action is executed in block 310. If the action contains a device command in block 312, the command is transmitted to the device in block 314. If the command includes a payload in block 316, the payload is transmitted to the device in block 318. If the action does not contain a device command in block 312, or if there is no payload in block 316, or if the payload has been transmitted in block 318, and another action exists in block 320, then the process continues in block 308. Otherwise the process ends in block 322." Applicants submit that the step of creating an action payload permits a user of the

present apparatus and method to introduce data to the component with a minimum of effort, since the script file is already set up to do so, if desired.

The Examiner continued that claims 1, 8 and 15 are also unclear because of the indentation use, as to what parts of the method are subsidiary to the other parts. Applicants again thank the Examiner for having noticed this inadvertent typographical error. In response thereto, applicants have returned the indentations to those of the claims as originally filed. Claims 2-7, 9-14, and 16-21 were rejected for incorporating the same indefinite subject matter of the independent claims from which they depend. Applicants believe that the restoration of the indentations presented in claims 1, 8 and 15, as originally filed, addresses the difficulties with these claims as well. No new matter has been added.

Claims 1, 2, 4-6, 8, 9, 11-13, 15, 16, and 18-20 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication 2003/0217358 to Thurston et al., since the Examiner stated that with regard to claims 1, 8, and 15, Thurston teaches packaging a communication sequence into a script by a method comprising (paragraph 29), providing said communication sequence that is a specific set of actions and action data (paragraphs 34-39); for each of said actions, creating an action header comprising an action code and one or more component specific commands (paragraphs 40-43), and creating an action payload comprising zero or more of said action data; transmitting said script to said controller (paragraphs 34-39); and communicating to said component of said system by running said script by said controller by a method comprising: providing said script to said controller (paragraphs 35-39); and for each of said action headers, executing a command corresponding to said action code (paragraphs 35-39 and 19-52), transmitting said one or more component specific commands directly to said component (paragraphs 35-39 and 19-52), and transmitting said zero or more of said action data from said action payload to said component (paragraphs 35-39 and 19-52). The Examiner continued that Thurston et al. teaches, by silence that no translation is occurring at the time of execution.

With regard to claims 2, 9, and 16, the Examiner stated that Thurston et al. teaches said packaging of said communication is performed by a first computer

system that is separate from said system controlled by said controller (paragraphs 27-29); with regard to claims 4, 11, and 18, Thurston et al. teaches said method of packing said communication sequence further comprises: creating a header for said script (paragraphs 40-43), said header comprising an identifier describing the specific component for which said script is intended (paragraphs 40-43); and said method of communicating to said component of said system by running said script by said controller further comprises, determining a descriptor of said component (paragraphs 40-43), comparing said descriptor of said component to said identifier contained within said header of said script (paragraphs 40-43); with regard to claims 5, 12, and 19, Thurston et al. teaches said method of packing said communication sequence further comprises: creating a header for said script (paragraphs 40-44), said header comprising a compatibility list comprising one or more applicable revisions of firmware on said specific component for which said script is applicable (paragraphs 44-47); and said method of communicating to said component of said system by running said script by said controller further comprises: determining a current firmware revision of said component; comparing said current firmware revision to said compatibility list contained within said header of said script (paragraphs 44-47); and with regard to claims 6, 13, and 20, Thurston et al. teaches said component is a hard disk drive (paragraph 27).

Applicants respectfully disagree with the Examiner concerning the rejection of claims 1, 2, 4-6, 8, 9, 11-13, 15, 16, and 18-20 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication 2003/0217358 to Thurston et al., for the reasons to be set forth hereinbelow.

Claims 3, 10, and 17 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0217358 to Thurston et al. in further view of U.S. Patent 6,789,157 to Lilja et al. since the Examiner stated that with regard to claims 3, 10, and 17, Thurston et al. teaches said method of packing said communication sequence further comprises: creating a header for said script (Paragraphs 40-43), said header comprising a checksum (Paragraph 42); and said method of communicating to said component further comprises: reading said header of said script (Paragraph 53), computing a computed checksum of said

script (Paragraph 53), comparing said computed checksum to said checksum contained within said header of said script (Paragraph 53), but Thurston et al. fails to teach a CRC. The Examiner continued that Lilja et al. teaches that using a firmware update with a CRC instead of a checksum, and concluded that it would have been obvious to one of ordinary skill in the art at the time of invention to substitute the use of CRC of Lilja et al. for the checksum of Thurston et al. in order to more completely check whether the firmware has been corrupted during transmission.

Applicants respectfully disagree with the Examiner concerning the rejection of claims 3, 10, and 17 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0217358 to Thurston et al. in further view of U.S. Patent 6,789,157 to Lilja et al., for the reasons to be set forth hereinbelow.

Claims 7, 14, and 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0217358 to Thurston et al. and further in view of U.S. Patent Application Publication 2002/0166027 to Shirasawa et al., since the Examiner stated that with regard to claims 7, 14, and 21, Thurston et al. fails to teach the firmware update script package being used to update a RAID controller, while Shirasawa et al. teaches said controller is a RAID controller (Paragraphs 8 and 9). The Examiner concluded that it would have been obvious to one of ordinary skill in the art at the time of invention to use the firmware update script package of Thurston et al. for updating RAID firmware as taught by Shirasawa et al. in order to homogenize the ability of each of the hard disk units to increase process speed and decrease error occurrence.

Applicants respectfully disagree with the Examiner concerning the rejection of claims 7, 14, and 21 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0217358 to Thurston et al. and further in view of U.S. Patent Application Publication 2002/0166027 to Shirasawa et al., for the reasons to be set forth hereinbelow.

Reexamination and reconsideration are requested.

Thurston et al., in Paragraph [0026] states: "Described implementations divide firmware updated operations into device-independent and device dependent

steps. Implementations provide a device independent application coupled to a plurality of device dependent applications for updating firmware in hardware devices coupled to a computer system. The device independent application is an application that does not perform operations that are dependent on characteristics of the hardware devices coupled to the computer system. The device dependent applications are applications that may contain operations that are dependent on characteristics of the hardware devices coupled to the computer system.” In paragraph [0038] of Thurston et al. it is stated that: “The device dependent plug-in modules **306** are device dependent applications that may contain operations dependent on the characteristics of the hardware device **310, 311.**” In Paragraph [0069], Thurston et al. continues that: “The implementations provide a firmware update application for updating firmware on different types of hardware devices. The firmware update application comprises a device independent firmware update utility and a plurality of device dependent plug-in modules. The device independent firmware update utility initiates the update of firmware on a plurality of different types of hardware devices and requests device specific functions from device dependent plug-in modules. A different device dependent plug-in module may be provided for each type of hardware device. Thus the firmware update application separates device independent firmware update functions from device dependent update functions.” (emphasis added by applicants). Paragraphs [0038] and [0039] state that: “The device independent firmware updated utility **302** is a device independent application that does not perform operations that are dependent on characteristics of the hardware device **310, 311.** The device dependent plug-in modules **306** are device dependent applications that may contain operations dependent on characteristics of the hardware device **310, 311.** An entity, such as a software vendor, that creates the firmware updated application **200**, may provide a firmware package construction tool **314**, where the firmware package construction tool **314** may be used by different vendors to construct the firmware package **108a.** The firmware package construction tool **314** ensures that the data structure comprising the firmware package **108a** are compatible with the firmware update application **200.**” And in Paragraph [0046] Thurston et al. states that: “The device

independent firmware update utility **302** extracts the list of properties package **402** from the firmware update package **108a** and forwards the firmware update package **108a** to the device dependent plug-in module **306**. In alternative implementations, the device independent firmware update utility **302** may extract the <name, value> pairs from the list of properties package **402** and forward the name value pairs to the device dependent plug-in module **306**. The device dependent plug-in module **306** uses the <name, value> pairs to apply the dynamic constraints for the firmware update encapsulated in to the <name, value> pairs."

The above-quoted paragraphs from Thurston et al., along with FIG. 3 thereof clearly show the requirement of a device dependent plug-in module, **306** for installing firmware updates onto hardware devices. Further, claim 1 of Thurston et al. recites a device-independent firmware update utility: "A method for installing firmware, the method comprising: receiving a firmware image by a device independent application; and requesting a device dependent application to install the firmware image on at least one hardware device, wherein the at least one hardware device is determined by the device dependent application." (emphasis added by applicants). Thus, Thurston et al. additionally requires that the system controller request a device dependent application to install a firmware image after receiving a firmware image by a device independent application, and does not install firmware onto a target device as directed by an incoming script without changes to these directions.

By contrast, subject independent claims 1, 8 and 15, as amended, in part recite the following: "1. ... communicating to said component of said system by running said script by said controller by a method comprising: ... for each of said action headers, executing a command corresponding to said action code, transmitting said one or more component specific commands to said component without component-dependent changes, and transmitting said zero or more of said action data from said action payload to said component without component-dependent changes." (emphasis added by applicants).

Parallel recitations may be found in subject claims 8 and 15. Thus, the independent claims of the present invention require that component specific

instructions are provided to a system controller to update a chosen component, as an example, the controller then transmits the one or more component-specific commands, without component-specific changes to the action code, to the component. The present, claimed system controller does not request component specific commands or functions from device dependent plug-in modules which translate the directions from the controller into commands the individual devices can process.

Therefore, applicants respectfully believe that Thurston et al. teaches away from the present claimed invention, and cannot anticipate the present claimed invention.

Dependent claims 2, 4-6, 9, 11-13, 16, and 18-20 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication 2003/0217358 to Thurston et al. Since applicants believe that independent claims 1, 8 and 15, as amended, are patentably distinguishable over Thurston et al. for the reasons set forth hereinabove, applicants believe that no further response is required with respect to the above-identified dependent claims.

Turning now to the rejection of dependent claims 3, 7, 10, 14, 17, and 21 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0217358 to Thurston et al. in view of other references, since applicants believe that Thurston et al. teaches away from the present claimed invention and, in particular independent claims 1, 8, and 15, as amended, applicants believe that the Examiner has not made a proper *prima facie* case for obviousness as is required under 35 U.S.C. 103(a), because there would be no motivation to combine Thurston et al. with these references.

In view of the discussion presented hereinabove, applicants believe that subject claims 1-21, as amended, are in condition for allowance or appeal, the former action by the Examiner at an early date being earnestly solicited.

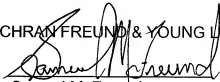
Reexamination and reconsideration are respectfully requested.

Respectfully submitted,

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Date: January 19, 2007

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